



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,734	02/27/2004	Ramnath N. Iyer	EI-7617	6096

34769 7590 03/29/2007
NEW MARKET SERVICES CORPORATION
(FORMERLY ETHYL CORPORATION)
330 SOUTH 4TH STREET
RICHMOND, VA 23219

EXAMINER

GOLOBOY, JAMES C

ART UNIT	PAPER NUMBER
----------	--------------

1714

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/788,734

Applicant(s)

IYER ET AL.

Examiner

James Goloboy

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/27/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. The rejections in the office action 10/12/06 are withdrawn following applicant's showing that the viscosity index improver of Papay is a dispersant viscosity index improver. New grounds of rejection are set forth below.

Claim Rejections - 35 USC § 102

2. Claims 1-6, 8, 10, 12-21, 25-27, and 29-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Watts (U.S. Pat. No. 5,942,472).

In column 3 lines 66-67 Watts discloses a lubricating composition comprising a lubricating oil, a viscosity modifier, and a friction modifier. In columns 6-9 Watts discusses suitable viscosity modifiers, and in column 9 lines 1-2 teaches that polymethacrylate, as in claim 2, is the preferred viscosity modifier. In column 8 lines 30-33 Watts teaches that dispersancy *may* be imparted to the viscosity modifiers, implying that non-dispersant viscosity modifiers can also be used. In Table 1 Examples 1-5, Watts discloses compositions comprising Viscoplex 8-220, which does not appear to be a dispersant viscosity index improver. In column 8 lines 65-67, Watts discloses that the preferred concentration of the viscosity modifier in the composition is between 4 and 10% by weight, falling within the range recited in claims 3-5. In column 4 lines 2-4 Watts teaches that the lubricating oil is a natural lubricating oil or a mixture of a natural or synthetic lubricating oil, meeting the limitations of claim 6. The composition of Watts therefore meets claims 1-7 and 35.

In column 1 lines 6-9 Watts discloses that the composition is a power transmission fluid, particularly an automatic transmission fluid as recited in column 8, and has improved anti-shudder durability. The use of the composition as an automatic transmission fluid also anticipates an automatic transmission lubricated with the fluid, as in claim 10, and the methods of claims 29-30. In column 13 lines 45-54, Watts discloses that the preferred dispersant for the composition has improved compatibility with elastomeric seals, including fluoroelastomers and silicone, and in column 13 line 36 teaches that a seal swellant can also be added to the composition. The composition of Watts therefore also meets claims 12-21, 25-27, and 31-34. Additionally, as the composition of Watts meets the structural limitations of claims 22 and 36, it also provides the improved compatibility recited in those claims.

3. Claims 1-4, 6-10, 12-16, 18-19, 22-25, 27, 29-32, and 34-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Srinivasan (U.S. PG Pub. No. 2002/0151441).

In paragraph 12 Srinivasan discloses an automatic transmission fluid with improved anti-shudder performance. In paragraph 32 Srinivasan discloses that the fluid comprises a major amount of a base oil. In paragraph 96 Srinivasan discloses that the composition preferably comprises a viscosity index (VI) improver, in paragraph 101 teaches one preferred VI improver is a non-dispersant polymethacrylate, meeting the requirements of claims 1-2, and a composition comprising only the non-dispersant VI improver meets the limitations of claim 7, and inherently meets the limitations of claim 9, as it has the same composition as claim 1. In paragraph 102 Srinivasan teaches that

Art Unit: 1714

the VI improver is preferably present in a concentration of 5-20% by weight, within the ranges recited in claims 3-4. In paragraph 114 Srinivasan teaches that the base oil can be either a natural or synthetic oil, and in paragraph 116 Srinivasan teaches that the base oil can be a blend, meeting the limitations of claim 6. The composition of Srinivasan therefore meets claims 1-4, 6-8 and 35.

The use of the composition as an automatic transmission fluid also anticipates an automatic transmission lubricated with the fluid, as in claim 10, and a method of lubricating a power transmission, as in claims 26 and 29-30. In paragraphs 123-131 Srinivasan discloses the addition of seal swell agents to the compositions to improve compatibility with elastomers. The fluid of Srinivasan therefore meets claims 10, 12-16, 18-19, 21, 24-27, and 31-34. Additionally, as the composition of Srinivasan meets the structural limitations of claims 22-23 and 36, it also provides the improved compatibility recited in those claims.

Claim Rejections - 35 USC § 103

4. Claims 5, 8, 11, 17, 21, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan.

The discussion of Srinivasan in paragraph 3 above is incorporated here by reference. The differences between Srinivasan and the currently presented claims are:

i) Srinivasan does not disclose a composition with a non-dispersant VI improver present in a concentration of 3-15% by weight. This relates to claims 5 and 17.

Art Unit: 1714

ii) Srinivasan does not explicitly disclose the use of the fluid in a continuously variable transmission. This relates to claims 8, 11, 21, and 28.

With respect to i), Srinivasan discloses in paragraph 102 that the VI improver is preferably present in a concentration of 5-20% by weight, overlapping the range recited in claims 5 and 17. In the case where the claimed ranges “overlap or lie inside ranges disclosed by the prior art” a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2144.05(I).

With respect to ii), Srinivasan teaches in paragraphs 24-25 that a need exists for automatic transmission fluids meeting the requirements of continuously variable transmissions (CVT) while retaining anti-wear, anti-shudder, and friction durability. In paragraph 26, Srinivasan teaches that the automatic transmission fluid of the invention exhibit excellent anti-shudder and friction durability.

Therefore, it would have been obvious to one of ordinary skill in the art to use the automatic transmission fluid of Srinivasan to lubricate a CVT, as Srinivasan teaches that the fluid has the desired properties for CVT lubricants.

5. Claims 20 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Srinivasan in view of Watts.

The discussions of Srinivasan in paragraph 4 and Watts in paragraph 3 above are incorporated here by reference. Srinivasan discloses a composition having

Art Unit: 1714

improved compatibility with elastomeric seals, but does not disclose what materials the seals are composed of.

As discussed in paragraph 3, Watts discloses power transmission fluids containing a non-dispersant VI improver and having improved compatibility with elastomeric seals made of fluoroelastomers and silicone.

It would have been obvious to one of ordinary skill in the art to use the power transmission fluid of Srinivasan with fluoroelastomers or silicone, as Watts teaches that those are common elastomeric seal materials.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Goloboy whose telephone number is 571-272-2476. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

James C. Goldroy
JCG

Cam Jagannathan
VASU JAGANNATHAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700